

## CLAIMS

1. Use of XCRF for the preparation of a medicament for treating and/or preventing a metabolic disease, wherein XCRF is selected from
  - a) A polypeptide comprising SEQ ID NO: 2;
  - b) A polypeptide comprising amino acids 17 to 258 of SEQ ID NO: 2;
  - c) A polypeptide comprising SEQ ID NO: 4;
  - d) A polypeptide comprising amino acids 22 to 287 of SEQ ID NO: 4;
  - e) A polypeptide comprising SEQ ID NO: 6;
  - f) A polypeptide comprising amino acids 16 to 238 of SEQ ID NO: 6;
  - 10 g) A polypeptide comprising SEQ ID NO: 8;
  - h) A polypeptide comprising amino acids 22 to 287 of SEQ ID NO: 8;
  - i) A fragment of any of (a) to (h) comprising the C-terminal C1q homology domain;
  - j) A mutein of any of (a) to (i), wherein the amino acid sequence has at least 40 % or 50 % or 60 % or 70 % or 80 % or 90 % identity to at least one of the sequences in (a) to (i);
  - 15 k) A mutein of any of (a) to (i) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding any of (a) to (i) under moderately stringent conditions or under highly stringent conditions;
  - l) A mutein of any of (a) to (i) wherein any changes in the amino acid sequence are conservative amino acid substitutions to the amino acid sequences in (a) to (i);
  - 20 m) a salt or an isoform, fused protein, functional derivative, active fraction or circularly permuted derivative of any of (a) to (i).
2. The use according to claim 1, wherein said metabolic-related disease or disorder is selected from the group consisting of:
  - (a) obesity;
  - (b) impaired glucose tolerance;
  - (c) insulin resistance;
  - (d) Syndrome X;
  - (e) atherosclerosis; and
  - 25 (f) Type II diabetes.
3. Use according to claim 1 or 2, wherein the XCRF is glycosylated at one or more sites.
4. Use according to claim 1 or 2, wherein the substance is not glycosylated.

5. Use according to any of the preceding claims, wherein the fused protein comprises an immunoglobulin (Ig) fusion.

5 6. Use according to any of the preceding claims, wherein the functional derivative comprises at least one moiety attached to one or more functional groups which occur as one or more side chains on the amino acid residues.

10 7. Use according to claim 6, wherein the moiety is a polyethylene moiety.

15 8. Use of a nucleic acid molecule for manufacture of a medicament for the treatment and/or prevention of a metabolic disease, wherein the nucleic acid molecule comprises a nucleic acid sequence encoding a polypeptide selected from:

a) A polypeptide comprising SEQ ID NO: 2;

b) A polypeptide comprising amino acids 17 to 258 of SEQ ID NO: 2;

c) A polypeptide comprising SEQ ID NO: 4;

d) A polypeptide comprising amino acids 22 to 287 of SEQ ID NO: 4;

e) A polypeptide comprising SEQ ID NO: 6;

f) A polypeptide comprising amino acids 16 to 238 of SEQ ID NO: 6;

20 g) A polypeptide comprising SEQ ID NO: 8;

h) A polypeptide comprising amino acids 22 to 287 of SEQ ID NO: 8;

i) A fragment of any of (a) to (h) comprising the C-terminal C1q homology domain;

j) A mutein of any of (a) to (i), wherein the amino acid sequence has at least 40 % or 50 % or 60 % or 70 % or 80 % or 90 % identity to at least one of the sequences in (a) to (i);

25 k) A mutein of any of (a) to (i) which is encoded by a DNA sequence which hybridizes to the complement of the native DNA sequence encoding any of (a) to (i) under moderately stringent conditions or under highly stringent conditions;

l) A mutein of any of (a) to (i) wherein any changes in the amino acid sequence are conservative amino acid substitutions to the amino acid sequences in (a) to (i);

30 m) an isoform, fused protein, active fraction or circularly permuted derivative of any of (a) to (i).

9. Use of a vector comprising a nucleic acid molecule of claim 8 for the manufacture of a medicament for treatment and/or prevention of a metabolic disease.

10. Use according to claim 9, wherein the vector is an expression vector.

11. Use according to claim 9 or 10, wherein the vector is a gene therapy vector.

5 12. Use of a vector for inducing and/or enhancing the endogenous production of a polypeptide according to any of claims 1 to 5 in a cell for the preparation of a medicament for the treatment and/or prevention of a metabolic disorder.

10 13. Use of a cell comprising a vector according to any of claims 10 to 12 for the preparation of a medicament for the treatment and/or prevention of a metabolic disorder.

14. The use according to and of claims 8 to 13, wherein said metabolic-related disease or disorder is selected from the group consisting of:

- 15 a) obesity;
- b) impaired glucose tolerance;
- c) insulin resistance;
- d) Syndrome X;
- e) atherosclerosis; and
- f) Type II diabetes.